

Notice of Allowability

Application No.

09/870,899

Examiner

Shobha Kantamneni

Applicant(s)

WILSON ET AL.

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/05/2005.
2. ☒ The allowed claim(s) is/are 1-6,8,9,13-20,23,25,41 and 71-102.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>9/30/05, 12/10/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The present invention is directed to a method of increasing the reproductive performance of a female swine, comprising the step of administering to the female swine a feed composition comprising a marine animal product; wherein the marine animal product comprises C20 and C22 omega-3 fatty acids or esters thereof; and wherein the feed composition as a final mixture comprises about 0.025 % to about 2 % by weight of marine animal product.

The closest prior art reference, Fritsche et al. (Enrichment of Omega-3-Fatty Acids in Suckling Pigs by Maternal Dietary Fish Oil Supplementation," J. Anim. Sci., Vol.71, pp.1841-1847, 1993) disclose that fish oil compositions, menhaden fish oil which is known to comprise C20 and C22 omega-3 fatty acids are useful in dietary compositions to feed sows. The reference lacks the particular amounts of fish oil in the compositions. Further, Boudreaux et al. (J. American Animal Hospital Assoc., Vol. 33, pp. 235-243, 1997) discloses that the range of the ratio of omega-6 fatty acids to omega-3 fatty acids in the composition to be administered to animals is within the instant claim. Neither Fritsche et al. nor Boudreaux et al. teach that the administration of fish oil compositions provide a benefit to female swine reproductive performance, including pig survival, number of pigs born per sow, birth weight, and weaning weights. Thus, they would not be any motivation to combine or modify the references to achieve

Art Unit: 1617

the instant claimed benefit, by feeding female swine a marine animal product comprising C20 and C22 omega-3 fatty acids or esters thereof.

The closest prior art reference, Abayasekare et al. discloses that dietary fatty acid compositions, i.e., fish oil, comprising instant fatty acids such as omega-6 fatty acids to omega-3, are useful in increasing the female performance, i.e., follicular development in the ovary, ovaulation, corpus luteum function, pregnancy, parturition, and lactation. However, Abayasekare et al. does not expressly disclose the dietary fatty acid compositions therein to be administered to female swine, and the particular amounts (percentage) of fish oil in the composition there, 0.025% to 2% by weight. Further, Abayasekara concludes that there is no reasonable expectation of success in the use of polyunsaturated fatty acids to enhance fertility. Thus, they would not be any motivation to modify the reference to achieve the instant claimed benefit i.e to enhance fertility by feeding female swine a marine animal product comprising C20 and C22 omega-3 fatty acids or esters thereof.

The prior art reference, Yeh et al. ("Enrichment of (n-3) fatty acids of suckling rats by maternal dietary menhaden oil, J. Nutr., Vol. 120, page 436, 1990) discloses that the enrichment of the n-3 fatty acids in newborns rats through milk provided by lactating mothers fed with high diet containing menhaden oil fish oil compositions, menhaden fish oil which is known to comprise C20 and C22 omega-3 fatty acids are useful in dietary compositions to feed sows, increases the weight of suckling rats by 5 to 10 %. However, the reference teaches the feeding of the menhaden fish oil to rats after the birth,

Art Unit: 1617

whereas the applicants invention is to increase the reproductive performance of female swine by feeding the swine with marine animal product i.e before giving birth.

The instant method of administering to the female swine a feed composition comprising a marine animal product; wherein the marine animal product comprises C20 and C22 omega-3 fatty acids or esters thereof; and wherein the feed composition as a final mixture comprises about 0.025 % to about 2 % by weight of marine animal product, provides benefits to female swine reproductive performance, including pig survival, number of pigs born per sow, birth weight, and weaning weights.

Thus, the method of the present invention is novel and unobvious over the prior art

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shobha Kantamneni whose telephone number is 571-272-2930. The examiner can normally be reached on Monday-Friday, 8am-5pm.

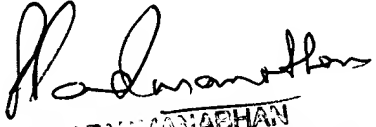
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 1617

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SREENIDHI MANABHAN
SUPERVISORY PATENT EXAMINER